

What is claimed is:

1. A method of responding to a request in a distributed system, said distributed system including a plurality of hosts, wherein each host is operable to respond to at least one type of request, the method comprising steps of:
 - receiving a multicasted message, said message including a request;
 - determining a type of said request; and
 - responding to said request based on said type of said request.
2. The method of claim 1, further comprising a step of designating a subset of said plurality of hosts for each type of request.
3. The method of claim 2, wherein said step of responding further comprises a step of a host of said plurality of hosts responding to said request in response to said host being included in a subset for said type of said request.
4. The method of claim 3, wherein said step of responding further comprises a step of determining whether responding to said request includes providing a state-changing response.
5. The method of claim 4, wherein said step of responding further comprises steps of:
 - generating multiple responses from multiple hosts in said subset for said type of said request;
 - transmitting said multiple responses to a client in response to said responding including a non-state-changing-response; and
 - synchronizing said multiple responses in response to said responding including a state-changing-response.
6. The method of claim 5, wherein said step of synchronizing further comprises a step of designating a synchronizing host operable to facilitate transmitting one of said multiple responses to said client.

7. The method of claim 6, wherein said step of synchronizing further comprises steps of:
transmitting a message to each host in said subset for said type of said request, said
message indicating that a response has been transmitted to said client; and
deleting said request from a queue for each host receiving said message.

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8. The method of claim 7, wherein said type of request includes one of a meta data request
and a data request.

9. A distributed system comprising:

10 a plurality of hosts, each host being included in a subset of hosts operable to respond to a
type of request; wherein each host is operable to receive a multicasted message including a
request, determine a type of said request, and respond to said request based on said type of said
request.

15 10. The distributed system of claim 9, wherein multiple hosts in a subset for said type of said
request responds to said request.

20 11. The distributed system of claim 10, wherein said multiple hosts in said subset for said
type of said request determines whether responding to said request includes providing a state-
changing response.

25 12. The distributed system of claim 11, wherein said subset for said type of said request
includes a synchronization host, said synchronization host is operable to facilitate transmitting a
single response to a client in response to said multiple hosts in said subset generating a state-
changing response.

30 13. The distributed system of claim 12, wherein said multiple hosts in said subset transmit a
response to said client in response to said multiple hosts in said subset generating a non-state-
changing response.

14. The method of claim 13, wherein said type of request includes one of a meta data request and a data request.

15. A computer readable medium on which is embedded a program, the program performing a method of responding to a request in a distributed system, said distributed system including a plurality of hosts, wherein each host is operable to respond to at least one type of request, the method comprising steps of:

receiving a multicasted message, said message including a request;

determining a type of said request; and

responding to said request based on said type of said request.

16. The computer readable medium of claim 15, wherein said method further comprises a step of designating a subset of said plurality of hosts for each type of request.

17. The computer readable medium of claim 16, wherein said step of responding further comprises a step of a host of said plurality of hosts responding to said request in response to said host being included in a subset for said type of said request.

18. The computer readable medium of claim 17, wherein said step of responding further comprises a step of determining whether responding to said request includes providing a state-changing response.

19. The computer readable medium of claim 18, wherein said step of responding further comprises steps of:

generating multiple responses from multiple hosts in said subset for said type of said request;

transmitting said multiple responses to a client in response to said responding including a non-state-changing-response; and

synchronizing said multiple responses in response to said responding including a state-changing-response.

20. The computer readable medium of claim 19, wherein said type of request includes one of a meta data request and a data request.

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